



WHITE PAPER

Computer Assisted Coding

LEVERAGING THE TIME AFFORDED BY THE ICD-10 TRANSITION DELAY

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Introduction

CAC is a technology that can improve the productivity of a HIM coder, while at the same time streamlining revenue cycle processes.

NOW THAT ICD-10 HAS BEEN DELAYED, organizations have a great opportunity to evaluate their Computer Assisted Coding (CAC) options and implement the solution that best suits their needs. In the mad dash to comply with the ICD-10 compliance date of Oct. 1, 2014, many organizations put the implementation of CAC on the back-burner – not having enough time, bandwidth or resources to effectively install the software. With the delay, organizations now can carefully evaluate their options. This paper explores some of the key issues organizations should consider as they manage the purchase/deployment of CAC.

What is CAC and why is it important?

CAC is a technology that can improve the productivity of a HIM coder, while at the same time streamlining revenue cycle processes. By automatically generating medical codes (ICD-9, and now ICD-10) from electronic clinical documentation sources (either dictated/transcribed or EHR sources), CAC can be a powerful tool by improving coder productivity.

To help overcome the expected loss in coder productivity due to the increased number of codes and complexity of ICD-10, many healthcare organizations have either purchased or considered purchasing CAC tools. Depending if an organization is either **1)** considering the purchase of CAC; **2)** implementing a CAC product already purchased; or **3)** simply fine-tuning installed CAC software, the following questions should be carefully reviewed:

- ▶ When will you receive return on investment (ROI)? What is the cost of HIM coders vs. three to five years of fees for software licenses, implementation, integration, training, and support/maintenance?
- ▶ Does the CAC software application integrate with your organization's encoder?
- ▶ Does the CAC software application integrate with your EHR/EMR? Are all of your clinical documentation reports available to be processed by the CAC's natural language processing engine? What reports are unavailable? What manual coding processes remain following the implementation of CAC?
- ▶ Who manages the frequent updates to the CAC software? You or the vendor? Do you have staff to make these changes?
- ▶ Is all CAC processing automated or is there a vendor-employed human coder performing 'back-office' coding behind the scenes? What are your compliance risks for 'back-office' coding?

Purchasing CAC

The evaluation and implementation of CAC products can be a lengthy and challenging process. Navigating the waters of vendor-marketing-speak can be daunting. To effectively evaluate CAC products, Leidos Health suggests the following due diligence:

1

Know these aspects of vendors in the CAC space:

- a. Years in business and reputation within the HIM market.
- b. Number of full-time employees, by skill set and length of time they have worked with the product.
- c. Age and genesis of natural language processing engine, find out if the engine was written for the U.S. healthcare coding and reimbursement market, or for some other purpose?
- d. Ontologies supported or not supported.
- e. Feature functionality and prices for in-house computing as well as cloud-based computing. Compare cost on a per transaction basis.

2

Check that references match up with the type and culture of your organization

- a. Coding and claim volumes.
- b. Medical specialties.
- c. Number of coders.
- d. Technology match with your platform(s).

3

Investigate levels of integration

- a. Does your EHR support integration with the CAC?
- b. Are there any interface fees?
- c. How long must you wait to have interface(s) installed?
- d. Is a third party vendor required to develop interfaces?

4

Calculate return on investment (ROI)

- a. Ask the CAC vendor to provide expected ROI information for your organization.
- b. Calculate your expected ROI and compare to vendor's info.

Implementing CAC

Implementing CAC takes time, effort, and resources. Whether you are starting small by implementing CAC in one outpatient area, interfacing simple, single-page clinical reports, or are attempting to implement full-blown inpatient CAC with complex multi-page clinical reports, there are many challenges. Consider the following:

1

Utilize the right resources for the job

- a. Deploy a knowledgeable project manager who knows the HIM coding environment, has experience installing software, and excellent PM skills.
- b. Identify a team of coders and EHR analysts who know the clinical documentation environment (including input systems and processes) at your organization inside and out.
- c. Know who the vendor is using to install their portion of the product. What are the skills and relevant experience of the vendor's implementation team?

2

Know the implementation timeline

- a. "Plan the work and work the plan".
- b. Allow additional time for integration. Consider this rule of thumb: the more clinical documents types, or the variability of the type, as well as the source, of clinical documents to be interfaced with CAC – the longer it will take to implement.

Fine-Tuning an Installed CAC Application

If your organization has already purchased and implemented a CAC product, you may have already encountered some of the unique aspects of fine-tuning the application.

Coding accuracy and proficiency are key requirements of all CAC applications. Many of the underlying problems within a CAC application are due to the natural language processing (NLP) engine. In most products, the NLP engine learns as it reads and processes clinical documents – meaning the application will eventually interpret the syntax of sentences contained within a clinical report, as well as relate multiple concepts and terms that may be scattered throughout a document, in order to generate an ICD-9/ICD-10 code. In some instances, however, issues occur as new or updated codes have not been uploaded into the CAC product code tables. In other cases, problems are encountered and productivity jeopardized due to the sluggishness of the system.

Be aware that not all CAC products are created equal. Some products were designed primarily for the processing of brief outpatient (or ambulatory) clinical reports, while other more robust CAC products can process complex inpatient, outpatient and ambulatory clinical reports.

Should you encounter issues while fine-tuning, Leidos Health suggests:

1

Know the proficiency and accuracy of your CAC system's output. Are you receiving denials for claims containing codes generated by the CAC product and interfaced to your billing system?

- a. Monitor CAC coding accuracy on a routine basis.
- b. Refer to CAC error reports, DNFB reports and Revenue Cycle claim denial reports to know the areas where CAC may not be performing as expected.
- c. Evaluate EHR and/or dictation/transcription system interfaces. Ensure that all the clinical documents that you expect to be processed are indeed being interfaced to your CAC application.

2

Contact the CAC vendor to confirm that your version of the CAC product supports the patient type (inpatient and/or outpatient) as well as the medical specialties and ontologies you believe were included at the time you purchased the software.

3

Request that the vendor evaluate the processing 'horse-power' that was identified for your specific organization's coding volumes, number of users, etc.

- a. Confirm that your hardware configuration is as outlined in the vendor's requirements. Have you had any changes since you implemented the software (added users, increased volume, etc.)?

4

Know when your vendor will supply you with the most updated mandated codes. When codes are added, be sure to test thoroughly.

5

Ensure the skill-level of the coders using the CAC product. Are they properly trained to use the CAC application? Do they have the knowledge to verify the accuracy of the output of the CAC product?



Conclusion



In view of the delay in the transition to ICD-10, organizations can now leverage the additional time to more effectively evaluate, implement, or improve their CAC usage. While problems and solutions may be unique to a specific organization, the suggestions within this paper can serve as a guide to implement or improve an organization's deployment of CAC.

CAC is a powerful tool that will help an organization streamline their HIM coding and revenue cycle processes. As with most complex technologies, it takes time, energy, and resources to ensure success.

ABOUT LEIDOS AND LEIDOS HEALTH

Leidos is a new company formed from the separation of FORTUNE 500® company SAIC on Sept. 27, 2013.

Leidos Health helps healthcare organizations achieve their goals of meeting regulatory requirements, improving quality of care, reducing costs and enhancing the patient experience. Its services include implementation and optimization of EHRs for all major vendors, as well as solutions for critical initiatives such as IT strategy, revenue cycle, clinical optimization, cybersecurity, Meaningful Use, ICD-10, technology infrastructure, and project management. Previously part of SAIC and including the former companies of maxIT Healthcare and Vitalize Consulting Solutions, Leidos Health is a new company with uncommon capabilities and a 40 year legacy of success.

For more information, visit leidoshealth.com.